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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,192	08/29/2001	Anand G. Dabak	TI-31597	6981

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EXAMINER	
PHAM, TUAN	

ART UNIT	PAPER NUMBER
2618	

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/942,192	DABAK ET AL.	
	Examiner	Art Unit	
	TUAN A. PHAM	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 August 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 60/228,850.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 4-5, and 10-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Cannon et al. (U.S. Patent No.: 6,650,871, hereinafter, "Cannon").

Regarding claim 1, Cannon teaches a piconet, comprising (see figure 1, piconet A, piconet B):

first (see figure 1, cordless telephone base unit 100a) and second communication devices (see figure 1, cordless telephone base unit 100b),

the first communication device (see figure 1, cordless telephone base unit 100a) communicating with the second communication device (see figure 1, cordless telephone base unit 100b) using a Bluetooth mode (2.4 GHz)(see figure 2, bluetooth transceiver 202) of transmission and a second mode of transmission (long range 900 MHz)(see figure 2, cordless base transceiver 208, col.3, ln.39-67, col.4, ln.1-67).

Regarding claim 4, Cannon further teaches the first communication device is a master unit (see figure 1, piconet A, base unit 100a act as a master when it communicate with slave 100-114 devices).

Regarding claim 5, Cannon teaches a scatternet, comprising.

a first piconet having a first communication device operating therein (see figure 1, piconet A, Bluetooth device 110);

a second piconet having a second communication device operating therein (see figure 1, piconet B, base unit 100b), and

a third communication device (see figure 1, base unit 100a) communicating to the first communication device using a Bluetooth mode (see figure 1, base unit 100a communicate with device 110 via Bluetooth link), and communicating to the second communication device using a second mode of transmission (see figure 1, base unit 100a, base unit 100b communicate each other via long range link 900 MHz, col.3, ln.39-67, col.4, ln.1-67).

Regarding claim 10, Cannon teaches a method for communicating between a first communication device and a plurality of other communication devices using multiple modes including a Bluetooth mode of operation (see figure 1, Bluetooth device 110-114), comprising the steps of:

(a) placing the first communication in the Bluetooth mode in order to communicate with a communication device from amongst the plurality of communication devices (see figure 1, Bluetooth devices 110-114, col.3, ln.39-67, col.4, ln.1-67); and

(b) placing the first communication device in a second mode in order to communicate with a communication device from amongst the plurality of communication devices (see figure 1, base unit 100a, remote handset 102a, 102b, base unit 100b, col.3, ln.39-67, col.4, ln.1-67).

Regarding claim 11, Cannon further teaches first communication device in step (b) uses a "within mode synchronous" technique while in the second mode whereby the packets used to communicate with the communication device from amongst the plurality are only synchronous while the first communication device is in the second mode (see col.5, ln.1-20).

Regarding claim 12, Cannon further teaches the first communication device uses packets to communicate with the communication devices in step (a) and (b) which are "across mode synchronous" (see col.5, ln.1-20).

Regarding claim 13, Cannon further teaches the communication device that the first communication device communicates with in step (a) and (b) is the same

communication device from amongst the plurality of communication devices (see figure 1, base unit 100a, remote handset 102a, 102b, base unit 100b, col.3, ln.39-67, col.4, ln.1-67).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon et al. (U.S. Patent No.: 6,650,871, hereinafter, "Cannon") in view of Shoobridge et al. (U.S. Patent No.: 6,326,926, hereinafter, "Shoobridge").

Regarding claim 2, Cannon discloses invention, but fails to disclose the second mode of transmission is a higher speed mode than the Bluetooth mode. However,

Shoobridge teaches such features (see figure 3, figure 4, first mode is Bluetooth mode that support 2.4GHz, and second mode is IEEE 802.11 family that support 5.8GHz).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Shoobridge into view of Cannon in order to provide a high data rate transmission.

6. **Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon et al. (U.S. Patent No.: 6,650,871, hereinafter, "Cannon") in view of Day (Pub. No.: US 2002/0120569).**

Regarding claims 3 and 9, Cannon discloses invention, but fails to disclose the synchronization and exchange the information at the same physical layer. However, Day teaches such features (see figure 3, [0023]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Day into view of Cannon in order to provide a low cost Bluetooth device as suggested by Cannon at col.1, ln.54-60.

7. **Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon et al. (U.S. Patent No.: 6,650,871, hereinafter, "Cannon") in view of Johansson (U.S. Patent No.: 6,975,613).**

Regarding claim 6, Cannon discloses invention, but fails to disclose a slave unit. However, Johansson teaches such feature (see figure 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Johansson into view of Cannon in order to provide a low cost Bluetooth device as suggested by Cannon at col.1, ln.54-60.

Regarding claim 7, Johansson further teaches a master unit (see figure 2).

Regarding claim 8, Johansson further teaches a device which acts as a master unit when communicating with the first communication device and acts as a slave unit when communicating with the second communication device (see figure 2, col.2, ln.60-67, col.3, ln.1-5).

Conclusion

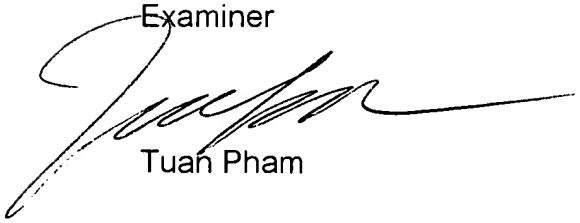
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In order to expedite the prosecution of this application, the applicants are also requested to consider the following references. Although Haartsen (U.S. Patent No. 6,519,460), Vij et al. (U.S. Patent No. 6,452,910), Lemilainen et al. (U.S. Patent No. 6,766,160), and Day (U.S. Pub. No. 2002/0120569) are not applied into this Office Action; they are also called to Applicants attention. They may be used in future Office Action(s).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Pham whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

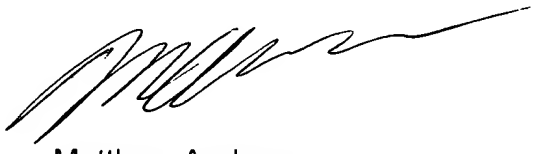
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2618
June 5, 2006
Examiner



Tuan Pham

Supervisory Patent Examiner
Technology Center 2600



Matthew Anderson